

Chapter II.—GENERAL SUMMARY

This chapter presents combined statistics for all manufacturing industries for 1927 in comparison with those for preceding census years. The table on page 14 gives a combined summary for all manufacturing industries from 1849 to 1927, and the table on page 16 gives a summary for 1927, 1925, 1923, 1921, and 1919, with percentages of increase or decrease from census to census.

Production as measured by physical volume.—Because of the radical changes in prices which took place during the period covered by the table on page 16, the total values of products for the several census years are not properly comparable. Statistics of the actual physical quantity of products manufactured provide the most accurate available measure of growth and production. A study of the physical volume of output as disclosed by census figures was made for the Department of Commerce by Prof. Edmund E. Day, of the University of Michigan, and Mr. Woodlief Thomas, of the Federal Reserve Board, and the results have been published under the title "The Growth of Manufactures," as one of the series of census monographs. The index numbers given below for 1914 to 1925, inclusive, were calculated from the material used in the preparation of this monograph, and the index for 1927 was calculated by the same method. Although data on physical volume of output can be obtained for only a comparatively few of the many commodities manufactured, and furthermore do not reflect changes in quality of products, the figures available cover industries of such basic importance that when summarized into a set of index numbers they may be considered as approximately representative of relative changes in the total volume of products manufactured.

Index of physical output:		Per cent of increase or decrease (—):	
1914.....	100.0	1914-1919.....	26.1
1919.....	126.1	1919-1921.....	-20.6
1921.....	100.1	1921-1923.....	53.7
1923.....	153.8	1923-1925.....	3.4
1925.....	159.0	1925-1927.....	.9
1927.....	160.5	1914-1927.....	60.5

Summary, 1849-1927.—Although the manufacturing industries of the country were canvassed at the censuses of 1810, 1820, and 1840, the results were not comparable with those of the manufactures inquiries made in 1850 and subsequent census years. The returns made by each manufacturing establishment at each census from 1850 to 1890, inclusive, covered either the preceding calendar year or some other 12-month period which usually ended within the census year. The returns from the censuses taken in 1900 and subsequent years have related in the case of each establishment either to the preceding calendar year or to the business year which corresponded most nearly thereto. In this report the statistics for all censuses are presented as relating to the year immediately preceding that in which the census was taken.

The manufactures data collected at the decennial censuses from 1850 to 1900, inclusive, covered the so-called neighborhood, hand, building, and household industries, as well as the factory industries, whereas the canvasses for 1904 and

subsequent census years covered factory industries only. (See "The factory system," p. 6.)

The statistics for 1899 (census of 1900) have been reduced to the factory basis by eliminating, so far as possible, the data for the neighborhood, hand, building, and household industries, but no such elimination is possible in the case of the earlier censuses. For this reason the statistics for years prior to 1899 are not comparable with those for 1904 and subsequent census years. Nevertheless, for the purpose of showing in a rough way the industrial progress of the country from census year to census year since 1849, the summary following is presented.

Two sets of figures are given for 1899, one including data for the neighborhood, hand, building, and household industries, in order to preserve comparability between 1899 and earlier years, and the other excluding such data in order to make the figures for 1899 comparable with those for later years. The financial items for 1869, which were reported in inflated currency worth in gold about 80 per cent of its nominal value, have been reduced to a gold basis in this presentation in order to make the figures for that year comparable with those for preceding and following census years.

COMBINED SUMMARY FOR ALL MANUFACTURING INDUSTRIES, FOR THE UNITED STATES: 1849 TO 1927

[The differences between the figures for the years 1914 to 1925 as shown in this table and in the similar table as published for 1925 are: (1) The statistics (except for the year 1925 for which the data were not tabulated) have been revised by the addition of data for "Coffee and spice, roasting and grinding" and (2) by the omission (from the statistics for all years) of the data for "Poultry killing and dressing"]

	Number of establish- ments	Wage earners (average for the year)	Wages
FACTORIES AND HAND AND NEIGHBORHOOD INDUSTRIES			
1849 ¹	123, 025	957, 059	\$236, 755, 464
1859 ¹	140, 433	1, 311, 246	378, 878, 966
Per cent of increase, 1849 to 1859.....	14.1	37.0	60.0
1869 ¹	252, 143	2, 053, 996	620, 467, 474
Per cent of increase, 1859 to 1869.....	79.6	56.6	63.8
1879 ¹	253, 852	2, 732, 595	947, 953, 795
Per cent of increase, 1869 to 1879.....	0.7	33.0	52.8
1889 ¹	355, 405	4, 251, 535	1, 891, 219, 606
Per cent of increase, 1879 to 1889.....	40.0	55.6	99.5
1899 ¹	512, 191	5, 306, 143	2, 320, 938, 168
Per cent of increase, 1889 to 1899.....	44.1	24.8	22.7
FACTORIES, EXCLUDING HAND AND NEIGHBORHOOD INDUSTRIES			
1899 ¹	207, 514	4, 712, 763	2, 008, 361, 119
1904 ¹	216, 180	5, 468, 383	2, 610, 444, 953
Per cent of increase, 1899 to 1904.....	4.2	16.0	30.0
1909 ¹	268, 491	6, 015, 046	3, 427, 037, 884
Per cent of increase, 1904 to 1909.....	24.2	21.0	31.8
Per cent of increase, 1899 to 1909.....	29.4	40.4	70.6
1914 ¹	272, 402	7, 022, 332	4, 067, 096, 462
Per cent of increase, 1909 to 1914.....	1.5	6.2	18.7
Per cent of increase, 1904 to 1914.....	26.0	28.4	55.8
1914 ²	176, 997	6, 894, 846	1 4, 067, 096, 462
1919 ²	214, 188	8, 997, 921	10, 459, 741, 826
Per cent of increase, 1914 to 1919.....	21.0	30.5	157.2
1921 ²	196, 098	6, 944, 315	8, 200, 359, 380
Per cent of decrease (-), 1919 to 1921.....	-8.4	-22.8	-21.6
1923 ²	196, 182	8, 776, 646	11, 007, 851, 450
Per cent of increase, 1921 to 1923.....	0.1	26.4	34.2
1925 ²	187, 224	8, 381, 511	10, 727, 337, 625
Per cent of increase or decrease (-), 1923 to 1925.....	-4.6	-4.5	-2.5
1927 ²	191, 866	8, 349, 755	10, 848, 802, 532
Per cent of increase or decrease (-), 1925 to 1927.....	2.5	-0.4	1.1

See footnotes at end of table.

COMBINED SUMMARY FOR ALL MANUFACTURING INDUSTRIES, FOR THE UNITED STATES: 1849 TO 1927—Continued

[See note at head of this summary]

	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture
FACTORIES AND HAND AND NEIGHBORHOOD INDUSTRIES			
1849 ¹	\$555, 123, 882	\$1, 019, 106, 616	\$403, 982, 734
1859 ¹	1, 031, 005, 092	1, 885, 861, 676	854, 256, 584
Per cent of increase, 1849 to 1859.....	85. 8	85. 1	84. 1
1869 ¹	1, 990, 741, 794	3, 385, 860, 354	1, 395, 118, 560
Per cent of increase, 1859 to 1869.....	93. 0	79. 5	63. 3
1879 ¹	3, 396, 823, 549	5, 369, 579, 191	1, 972, 755, 042
Per cent of increase, 1869 to 1879.....	70. 6	58. 6	41. 4
1889 ¹	5, 162, 013, 878	9, 372, 378, 843	4, 210, 304, 965
Per cent of increase, 1879 to 1889.....	52. 0	74. 5	113. 4
1899 ¹	7, 343, 627, 875	13, 000, 149, 159	5, 656, 521, 284
Per cent of increase, 1889 to 1899.....	42. 3	38. 7	34. 3
FACTORIES, EXCLUDING HAND AND NEIGHBORHOOD INDUSTRIES			
1899 ¹	6, 575, 851, 491	11, 406, 926, 701	4, 831, 075, 210
1904 ¹	8, 500, 207, 810	14, 793, 902, 563	6, 293, 694, 753
Per cent of increase, 1899 to 1904.....	29. 3	29. 7	29. 7
1909 ¹	12, 142, 790, 878	20, 672, 051, 870	8, 529, 260, 992
Per cent of increase, 1904 to 1909.....	42. 9	30. 7	35. 5
Per cent of increase, 1899 to 1909.....	84. 7	81. 2	76. 5
1914 ¹	14, 347, 729, 411	24, 203, 597, 965	9, 855, 868, 554
Per cent of increase, 1909 to 1914.....	18. 2	17. 1	15. 6
Per cent of increase, 1904 to 1914.....	68. 8	63. 6	50. 6
1914 ²	14, 267, 137, 298	23, 974, 957, 468	9, 707, 820, 170
1919 ²	37, 196, 688, 773	62, 000, 093, 444	24, 803, 404, 671
Per cent of increase, 1914 to 1919.....	160. 7	158. 6	155. 5
1921 ²	25, 291, 734, 235	43, 618, 565, 920	18, 326, 831, 685
Per cent of decrease (—), 1919 to 1921.....	—32. 0	—29. 6	—26. 1
1923 ²	34, 083, 915, 155	60, 529, 574, 115	25, 845, 658, 960
Per cent of increase, 1921 to 1923.....	37. 1	38. 8	41. 0
1925 ²	35, 896, 886, 428	62, 668, 259, 591	26, 771, 373, 163
Per cent of increase or decrease (—), 1923 to 1925.....	3. 5	3. 5	3. 6
1927 ²	35, 133, 136, 889	62, 718, 347, 289	27, 585, 210, 400
Per cent of increase or decrease (—), 1925 to 1927.....	—2. 1	0. 1	3. 0

¹ For all establishments having a value of products of \$500 or more.² For all establishments having a value of products of \$5,000 or more.

